

Figure 1A

61	agagagcagctcccttcccctcggcgaggaggaaggaagaagaaagccagagagag		
121	tgatcctacgaaaaagaggtaatggatactggcggcaattcgctggcgtccggacctgat M D T G G N S L A S G P D	13	
	ggtgtgaagaggaaagtttgttatttctatgaccctgaggtcggcaattactactatggc G V K R K V C Y F Y D P E V G N Y Y Y G	33	
	caaggtcatcccatgaagccccatcgcatccgcatgacccatgccctcctcgctcactac Q G H P M K P H R I R M T H A L L A H Y	53	
	ggteteetteageatatgeaggtteteaageeetteeetgeeegeaaegtgatetetge G L L Q H M Q V L K P F P A R E R D L C egetteeaegeegaegaetatgtetettteteegeageattaeeeetgaaaeecageaa	73	
	R F H A D D Y V S F L R S I T P E T Q Q gatcagattcgccaacttaagcgcttcaatgttggtgaagactgtcccgtctttgacggc	93	
	D Q I R Q L K R F N V G E D C P V F D G ctttattccttttgccagacctatgctggaggatctgttggtggctctgtcaagcttaac	113	
	L Y S F C Q T Y A G G S V G G S V K L N cacggeetetgegatattgecateaactgggetggtggtetecateaegetaagaagtge	133	
601	H G L C D I A I N W A G G L H H A K K C gaggeetetggettetgttacgteaatgatategtettagetateetagageteettaag	153	
661	E A S G F C Y V N D I V L A I L E L L K cagcatgagcgtgttctttatgtcgatattgatatccaccacggggatggagtggaggag O H E R V L Y V D I D I H H G D G V E E	173 193	
721	Q H E R V L Y V D I D I R R G D G V L D gcattttatgctactgacagggttatgactgtctcgtttcataaatttggtgattacttt A F Y A T D R V M T V S F H K F G D Y F	213	
	cccggtacaggtcacattcaggatataggttatggtagcggaaagtactattctctcaat PGTGHIQDIGYGSGKYYSLN	233	
	gtaccactggatgatggaatcgatgatgagagctatcatctgttattcaagcccatcatg V P L D D G I D D E S Y H L L F K P I M	253	
	gggaaagttatggaaattttccgaccaggggctgtggtattgcaatgtggtgctgactcc G K V M E I F R P G A V V L Q C G A D S ctatctggggatcggttaggttgcttcaatctttcaatcaa	273	
	L S G D R L G C F N L S I K G H A E C V aaatttatgagatcgttcaatgttcccctactgctcttgggtggtggttgcttacactatc	293	
	K F M R S F N V P L L L G G G G Y T I cgcaatgttgcccgttgctggtgctacgagactggagttgcacttggagttgaagttgaa	313	
	R N V A R C W C Y E T G V A L G V E V E qacaaqatgccggagcatgaatattatgaatactttggtccagactatacacttcacgtt	333	
1201	D K M P E H E Y Y E Y F G P D Y T L H V gctccaagtaacatggaaaataagaattctcgtcagatgcttgaagagattcgcaatgac	353 373	
1261	A P S N M E N K N S R Q M L E E I R N D cttctccacaatctctctaagcttcagcatgctccaagtgtaccatttcaggaaagacca L L H N L S K L Q H A P S V P F Q E R P	393	
	cctgatacagagactcccgaggttgatgaagaccaagaagatggggataaaagatgggat PDTETPEVDEDQEDGDKRWD	413	
	ccggattcagacatggatgttgatgatgaccgtaaacctataccaagcagagtaaaaaga PDSDMDVDDDRKPIPSRVKR	433	
	gaagctgttgaaccagatacaaaggacaaggatggactgaaaggaattatggagcgtgga E A V E P D T K D K D G L K G I M E R G	453	
	aaaggttgtgaggtggaggtggatgagagtggaagcactaaggttacaggagtaaaccca K G C E V E V D E S G S T K V T G V N P gtgggagtggaggaagcaagtgtgaaaatggaaggaagga	473	
	V G V E E A S V K M E E E G T N K G G A gagcaggcgtttcctcctaaacataagactcggagcttctaatttcttgctactttttc	493	4
1681	E Q A F P P K T * tgtctatcaaatgttgctagttaagtttctggagttgttgttgttaagcactcctctg	502	501
1741	ttttagaggattgagcacggatatgtatttattcgttgcatgtctgaatgatgatatgatatgatatgacaa		

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Figure 3

AtRPD3A AtRPD3B ZmRPD3 RPD3	MDTGG NSLAS'GPDG VKRKVCYFYD PEVGNYYYGC GHPMKPHRIF MEADESSISLPS-GPDG PKRRVSYFYE PTISDYYYGC GHPMKPHRIF MEPSSAGSGG NSLPSVGPDG CKRRVCYFYD PDVGNYYYGC GHPMKPHRIF TVYEATPFD TITVKPS DKRRVAYFYD ADVGNYAYGA GHPMKPHRIF	45-44 47 50 46
AtRPD3A AtRPD3B ZmRPD3 RPD3	MTHALLAHYG LLCHMOVLK? FPARERDLCR FHADE VSFI RSITPETOC: MAHSLIHYH HRRLEISRP SLADASDIGR FHSPEYVDFI ASVSPESMG. MTHSLLARYG LLNCMOVYRF NPARERELCR FHAEEYINFI RSVTPETOC: MAHSLIMNYG LYKKMEIYFA KPATKOEMCO FHTDEYIDFI SRVTPD: LEM	95 GH 97 100 96
AtRPD3A AtRPD3B CmRPD3 RPD3	OIROLKRF NVGEDCPVFD GLYSFCOTYA GGSVGGSVKL NHGL CDIAI: PSAARNLERF NVGEDCPVFD GLFDFCRASA GGSIGAAVKL RODADIAI: OIRLLKRF NVGEECPVLD GLYSFCOTYA GASVGGAVEF NHCH-DIAI:FKEESVKF NVGDDCPVFD GLYEYFSIEG GGSMEGAAR! NRGKEDVAV:	143-142 147 148-147 144
AtrPD3A AtrPD3B ZmRPD3 RPD3	WAGGLHAKE CEASGFCYVE DIVLAILELL KOHERVLYVE IDIHHGDGVE SGGLHHAKE SEASGFCYVN DIVLAILELL KHEORVLYVE IDVHHGDGVE YAGGLHHAKE SEASGFCYLN DIVLGIIELL RYHFEVLYIL IDVHHGDGVE IDVHHGDGVE	193-192 197 198-197 194
AtrpD3A AtrpD3B ZmRPD3 RPD3	EAFYATORVM TVSFHKFGDY FPGTGHIQDI GYSGKYYSL NVPLDDGIDL EAFYTTORVM TVSFHKFGDF FPGTGHIRDV GAEKGKYYAL NVPLDDGIDL EAFYTTORVM TCSFHKYGEF FPGTGELRDI GVGAGKNYAV NVPLRDGIDL	243-242 247 248-247 244
AtRPD3A AtRPD3B ZmRPD3 RPD3	ESYHLLFKPI MGKVMEIFRF GAVVLQCGAD SLSGDRLGCF NLSIKGHAEC ESFRSLFRPL IQKVMEVYQF EAVVLQCGAD SLSGDRLGCF NLSVKGHAEC ESYCSLFKPI MGKVMEVFRF GAVVLQCGAD SLSGDRLGCF NLSIKGHAEC ATYRSVFEPV IKKIMEWYQF SAVVLQCGG SLSGDRLGCF NLSMEGHAN	295 292 297 298 297 294
AtrpD3A AtrpD3B ZmrPD3 RPD3	VKFMRSFNVP LLLLGGGGYT IRNVARCWCY ETGVALGVEV EDKMFEHEYY LRFLRSYNVP LMVLGGEGYT IRNVARCWCY ETAVAVGVEF DNKLPYNEYF VRYMRSFNVF LLLLGGGGYT IRNVARCWCY ETGVALGOEF EDKMFVNEYY WRVVKSFGIF MMVVGGGGYT MRNVARTVCF ETGLLNN VL KDLPYNEYY	342 342 347 348 347 344
AtrpD3A AtrpD3B DmRPD3 RPD3	EYFGPDYTLE VAPSNMENKE SROMLEEIRE DLLHNLSKLO HAPSVPFQEE EYFGPDYTLE VDPSNMENKE TPKDMERIRE TLLHNLSGEI HAPSVOFOH EYFGPDYTLE VAPSNMENKE TROOLDDIPSKLSKLR HAPSVHFQEE EYYGPDYKLS VRPSNMFNV TPEYLDKVMT NIFANLENTK YAPSVOLNHT	393 392 397 294 393 394
AERPD3A AERPD3B ZmRPD3 RPD3	PPDTETPEVD RDOFDGDYRW DPDSDMDVDD DK KPIPSRVKRE PPVNRVLD	
AERPD3A AERPD3B 2mRPD3 RPD3	AVEPDEKOKO ELEGIMEREK GCEVEVDESE STEVTGV NPVEVEEAS- TATYESOSO DDEPLHGY SE	413
AERPD3A AERPD3B ZmRPD3 RPD3	VKMBEEGTNE GGAEQEFEPE T DNPDEDVNPESS VKNDPESSTE EQGQAEAYHE P TEGGSQYARD EHVEHDNEFY	502-50 / 471 514-513 422-433



Figure 4

Achd2A	MEFWGIEVKS GRPVTVTPEE GILIHUSOAS LGECKUKKGE FVPLHVKVGN	50
Achd2B	MEFWGVAVTE KNATKVTPEE DSLVHISOAS L-DCTVKSGE SVVLSVTVGS	49
Imhd2	MEFWGLEVKE GSTVKCEPGY GFVLHISOAA LGES KKSD NALMYVEIDD	48
AtHDSA	ONLVLGTLST ENIPOLECOL VPDKEFELSH TWGKGSVYTV GYKTPNIEPQ	100
AtHDSB	AKLVIGTLSO DKFPOISFDL VFDKEFELSH SGTKANVHEI GYKSPNIEQD	99
ZmHDS	OKLAIGTLSU DKNBHIOFDL IFDKEFELSH TSKTTSVFFT GYFVEQPFEE	98
AtHD2A	GYSEEEEBE- EBEVPACNAAKAVA <mark>KPK AKPAEVKPA</mark>	136
AtHD2B	Detssdeelv beavpapapt a <mark>v</mark> ta <mark>ng</mark> naga avvkadt <mark>kpk akpaevkpa</mark> e	149
EmHD2	Demoldsede deelnve vvke <mark>ngka</mark> de kko-sqekav aapsksseds	145
AtHD2A AtHD2B 2mHD2	DDBEDE SUS-E	162 197 195
AtHD2A	ETEKKPAS -SKKRANETT PKAPVSAKKA KVAVTE QKTDEEK	202
AtHD2B	ETEKKPEP INKKRPNESV SKTPVSGKKA EPAAAPASTE QKTEK	240
ZmHD2	ETE-KKPEV XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	238
AtHD3A AtHD3B EmHD2	-KGGKA CGSC-KKTFN KKGGHTAT PHPAK KGGKSPVNAN DSPKSGGOS GGNMNKKPFN -KGAAVHVAT PHPAKGETIV MNDKSVKSPK SAPKSGGS P CKPGSK-SFI	029 283 285 Jolo
AEHDDA	SCNALE-SHN KAKHAAAK	245
AEHDZB	SCKOFGGSNE KGSNEGKGKG RA	305
ZmHD2	SET <mark>AL</mark> QA-HS R <mark>AK</mark> MGASESQ VQ	208 307